

Amendments to the Specification:

Please replace paragraph [00023] with the following amended paragraph:

[00023] The tool steel layer can have a thickness of less ~~then~~ than about 0.5 inches. In some embodiments, preferably, the tool steel layer has a thickness ranging from about 0.060 to about 0.090 inches and is present on the parting surface of the chill block or chill block face. A tool steel layer may also be bonded on a portion of the sides of the chill blocks and/or the bottom of the chill block. Chill blocks in accordance with the present invention allow molten metal to solidify in the passageway formed by a pair of chill blocks, and provide for efficient manufacturing of objects by die casting methods.

Please replace paragraph [00039] with the following amended paragraph:

[00039] Shown in FIG. 4 is a side view of two chill blocks 12, 14 placed in a mold 114. In a preferred embodiment of the present invention, a chill block 12 is placed in the tool 116 that forms, for example the top portion of the mold (top tool device). The chill block 12 placed in the top tool device 116 is referred to as the cover chill block. In a preferred embodiment of the present invention, chill block ~~144~~ 14 is placed in the in the tool 118 that forms, for example the bottom portion of mold (bottom tool device). The chill block 14 placed in the bottom tool device 118 is referred to as the ejector chill block.

Please replace paragraph [00041] with the following amended paragraph:

[00041] During die casting, molten metal is injected into the tool inlet port 24. The molten metal flows into the channel 26, and into the die cavity inlet ports 28, 30, 40, 42 that are open to the channel ~~24~~ 26. As the molten metal flows into the die cavities 16, 18, 20, 22 gas, for example, air, that is present in a die cavity 16, 18, 20, 22 flows out of a die cavity 16, 18, 20, 22 via the die cavity outlet ports 44, 46, 48, 50, 52, 54, 56, 58 and into overflow passageways 60, 61, ~~and~~ 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82. From the overflow passageways 120, the gas moves into one or more chill block passageways ~~118~~ 120 via the chill block inlet port 100 and out from chill block passageway 118 via a chill block outlet port 83, 85, 124.

Please replace paragraph [00042] with the following amended paragraph:

[00042] The application of, for example, copper or beryllium copper to the chill block base, provides for a heat transfer rate that allows molten metal that flows into a chill block passageway 118 to solidify in the chill block passageway ~~116~~ 120. Accordingly, molten metal may be prevented from exiting the tool via the chill block outlet port 83, 85, 124.

Please replace paragraph [00043] with the following amended paragraph:

[00043] After any overflow molten metal has solidified in the chill block passageway ~~118~~ 120, the top and bottom tool devices ~~114, 116, 116, 118~~, including the cover and ejector chill blocks 12, 14, are separated and the objects formed in the die cavities are removed.